



Early Childhood Education: National and Virginia perspectives on effective programs and policy

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The Premise: Early Childhood Education

Every poor child has access to a highly effective preschool program before they enter Kindergarten.

- **Ingredients: Effective curriculum; high-quality teacher-child interactions; trained workforce; K readiness assessment.**
- **Sufficient intensity to close gaps.**
- **Scale: Statewide infrastructure, regulation, and support for local implementation of effective models**

Early Childhood—Access



Fragmented, idiosyncratic implementation

Access: How are we doing?

- **70% of 3- to 4-year-olds in some form of preschool education (HS, pre-k, child care); 40-50% enrollment among low income, etc.**
- **Head Start:** roughly 1 million children
- **State pre-k:** 40+ states, 1.5 million 4-year-olds
- **Public spends \$21-\$27B (\$2K-\$15K/child)**
- **Full/part; universal/targeted**
- **Virginia:** HS and VPI enrolling at national levels; room for added #s in VPI

Impacts on school readiness

- **Experimental and scaled-up programs**
- **Key issues – costs and educational intensity**
- **“Educational” programs yield greater benefits (~30% long-term gap; 50% gap in one year)**
- **Abcedarian, Chicago, Perry**
 - Long-term academic, social gains; ROI - \$3-\$15
- **State scaled-up pre-K programs**
 - Oklahoma, Georgia, Maryland, Pennsylvania, North Carolina
 - .5-.8 s.d.; larger impacts for poor (half the gap in one year)
 - Positive trends on state standards found consistently
- **Head Start evaluations**
 - Very few benefits in short term; by and large no effects

Impacts

- Interpret ROI with care
- Virginia
 - Some evidence of benefits (JLARC)
 - No controlled evaluations
 - Quality, curriculum uneven
 - Lacking readiness assessments
 - Strong work on standards

Program Quality

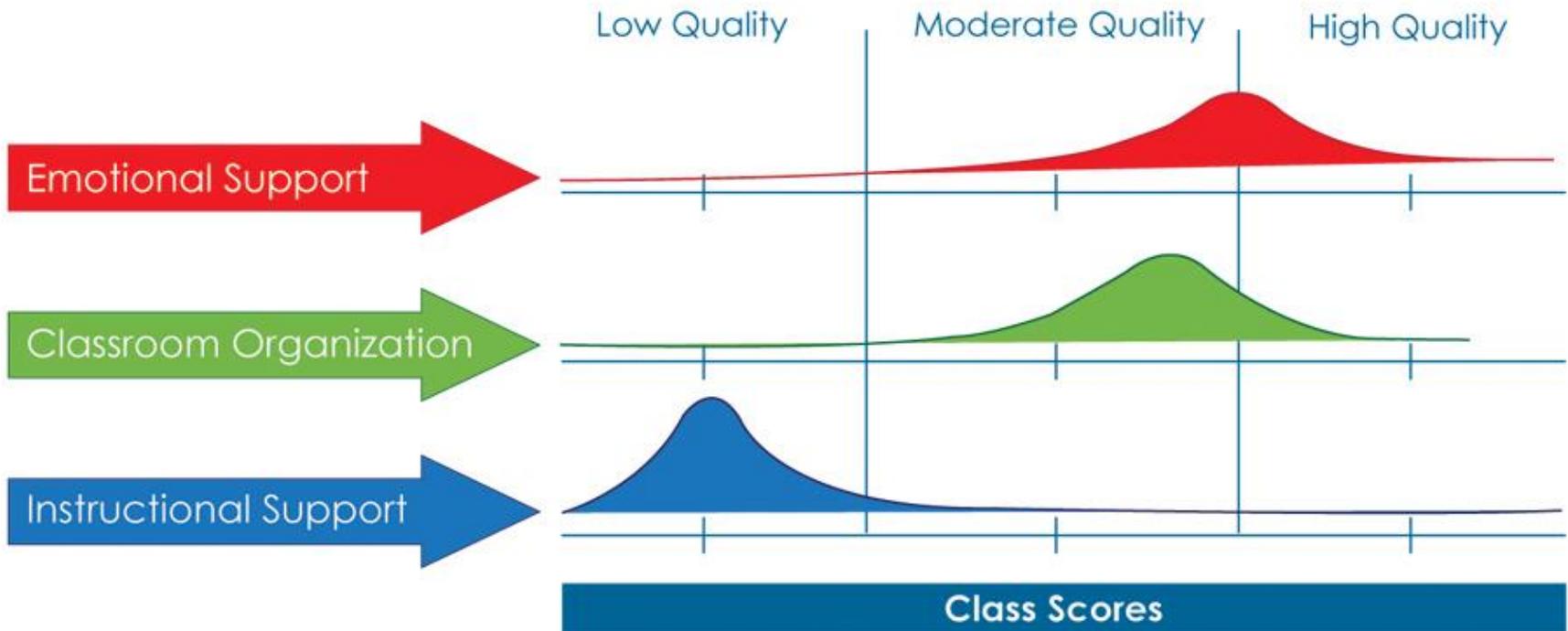
- **Structural aspects (ratio, teacher credentials)**
- **\$835 million (RTT, QRIS) to improve “quality” mostly based on structural features)**
- **No evidence that structural indicators drive learning (several studies)**
- **Qualities of children’s experiences in classroom setting drive learning**
 - Curriculum
 - Teacher-child interactions

Defining quality

- **Debate has shifted to focus on what's happening in classrooms: Quality that matters for children's learning**
- **Teacher-child interactions**
- **Curriculum**
- **Workforce development**

Quality of teacher-child interactions

Average Ratings of Interactions in Pre-K - 3rd Classrooms



Interactions and children's PK development

	Emotional Support	Instructional Support	ECERS-R Total	Structural
Receptive Language		✓		
Expressive Language		✓	✓	
Rhyming		✓		
Letter Naming		✓		
Math Skills		✓		
Social Competence	✓			
Behavior Problems	✓			

Changes in children's development from beginning to end of preschool

Mashburn, et al. (in press)

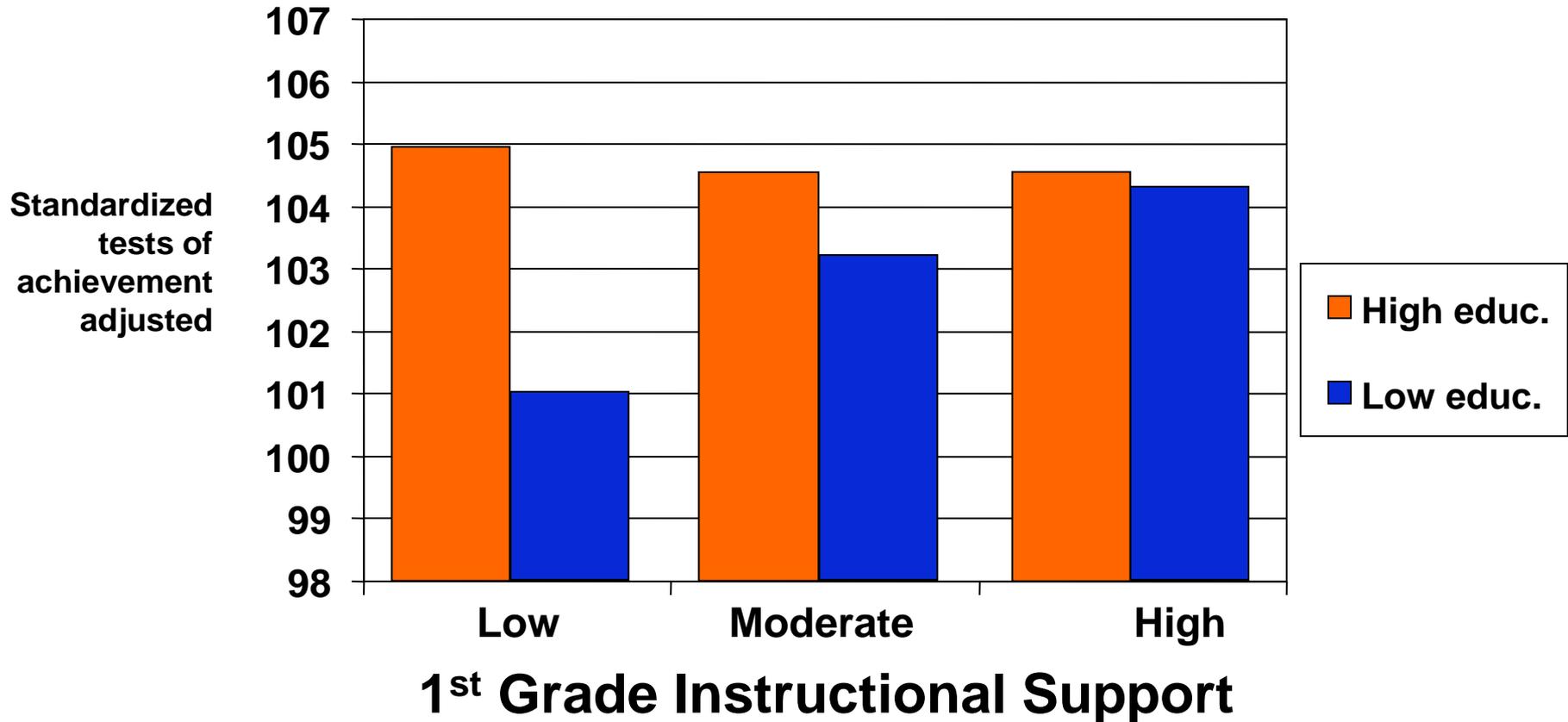
Do effects of interactions in PK persist into K?

- Yes, children in pre-k classrooms offering higher levels of Instructional Support displayed better language skills at the end of the kindergarten year.
- Kindergarten Instructional Support scores made an independent contribution to gains in children's language and math abilities.
- And when QRIS include observations of interactions, they predict readiness. Otherwise not.

Interactions are really important for...

...children from low-income families and those who have difficulty adjusting to classroom environments may particularly benefit from exposure to high quality early learning environments as defined by the CLASS.

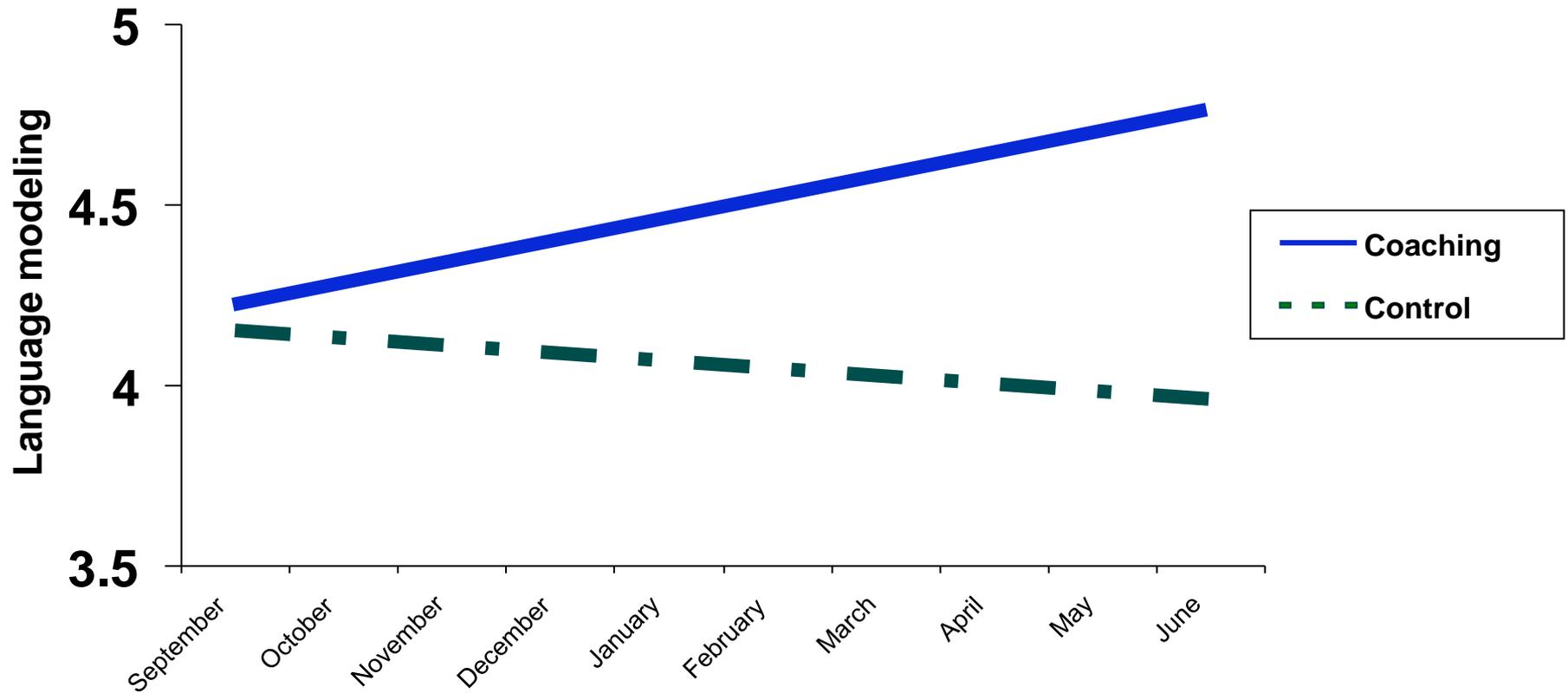
Gains in grade 1 achievement in instructionally supportive classrooms



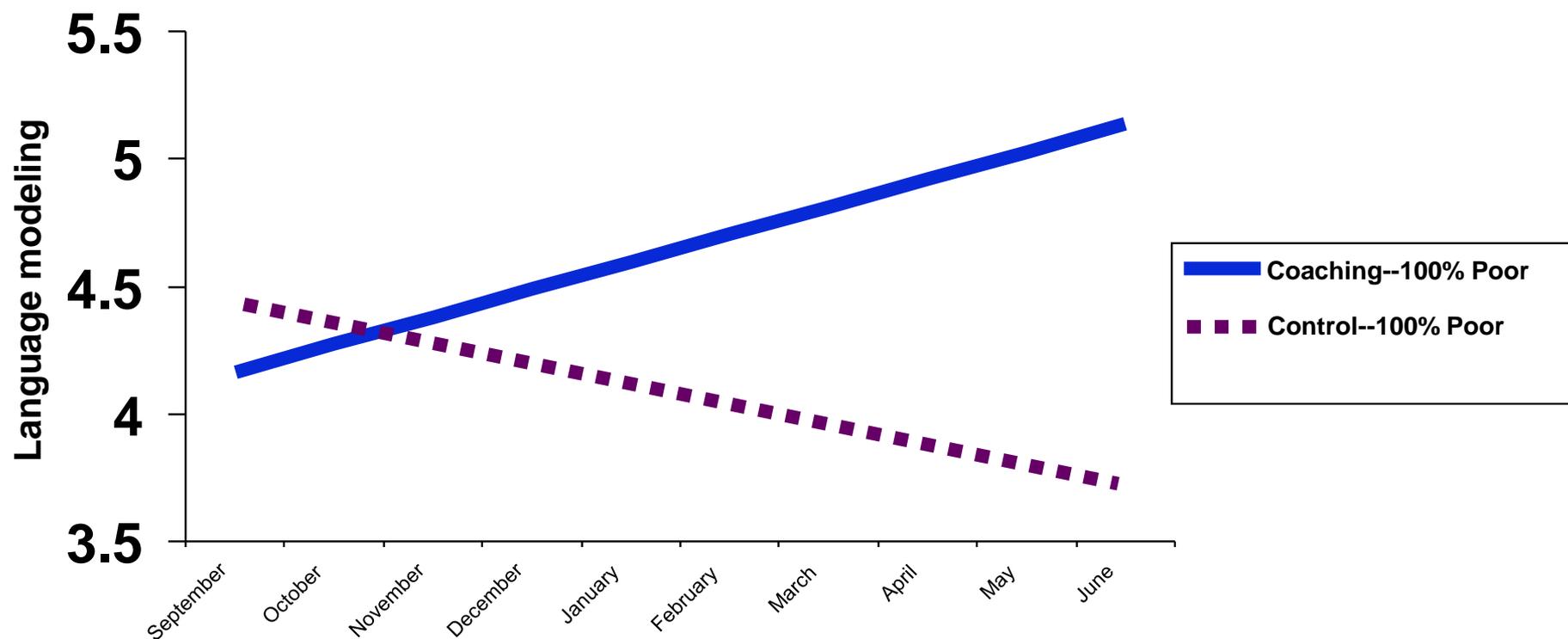
Improving interactions and their value

- **Link supports to teachers to their interactions with children – Building quality**
- **CLASS – specific definitions of interactions – a target**
- **Video Library – analysis of others' interactions**
- **Coaching – ongoing analysis/feedback on own interactions (MyTeachingPartner, or MTP)**
- **Course – knowledge and analytic skills**
- **All tested in experiments**

MTP Coaching improves interactions



Classrooms with high poverty benefit more from MTP coaching for teachers



Findings: Effects of MTP support in PK

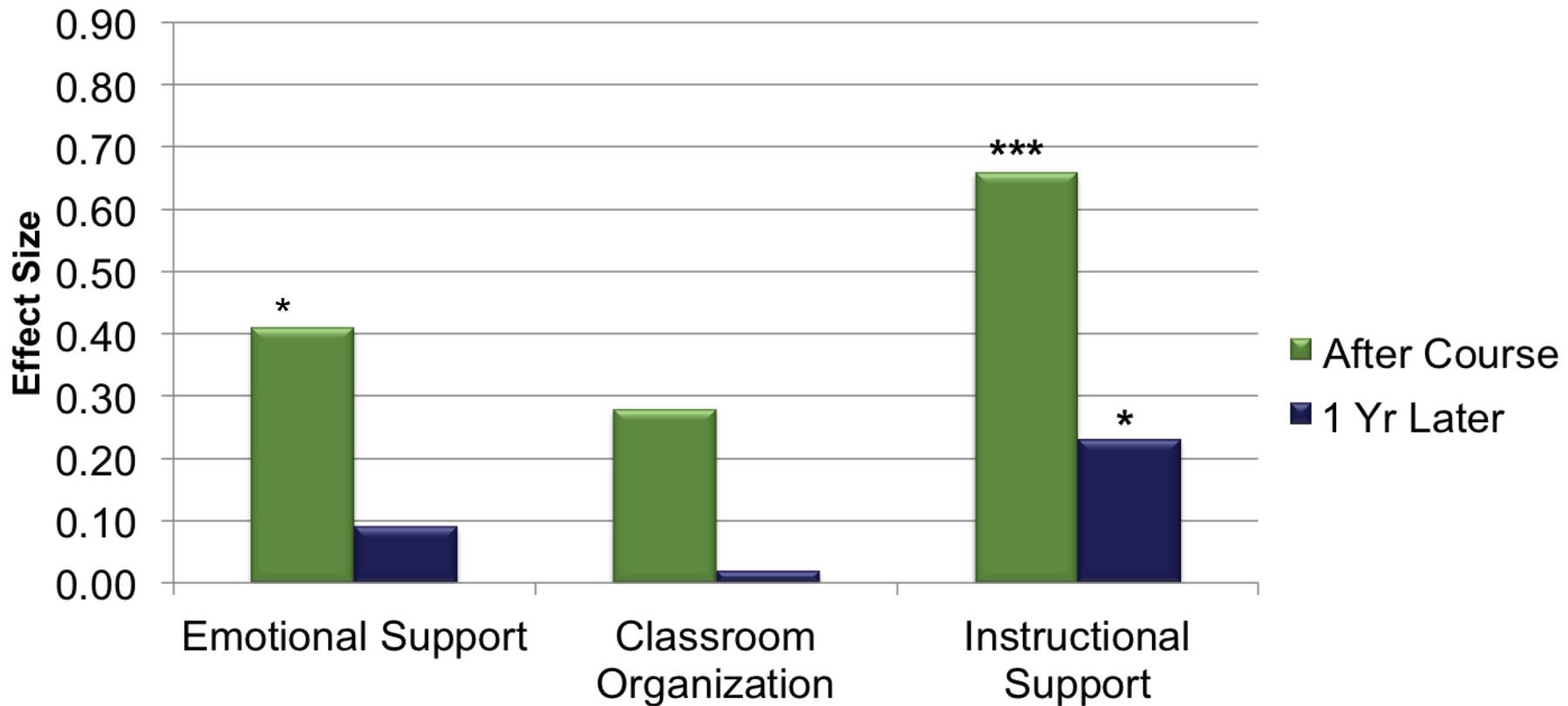
■ Teachers with MTP coaches

- More sensitive in interactions with students
- Increased students' engagement in instruction
- Improved language stimulation techniques
- High-poverty classrooms benefit a great deal
- Early career teachers benefit even more

■ Children with MTP teachers

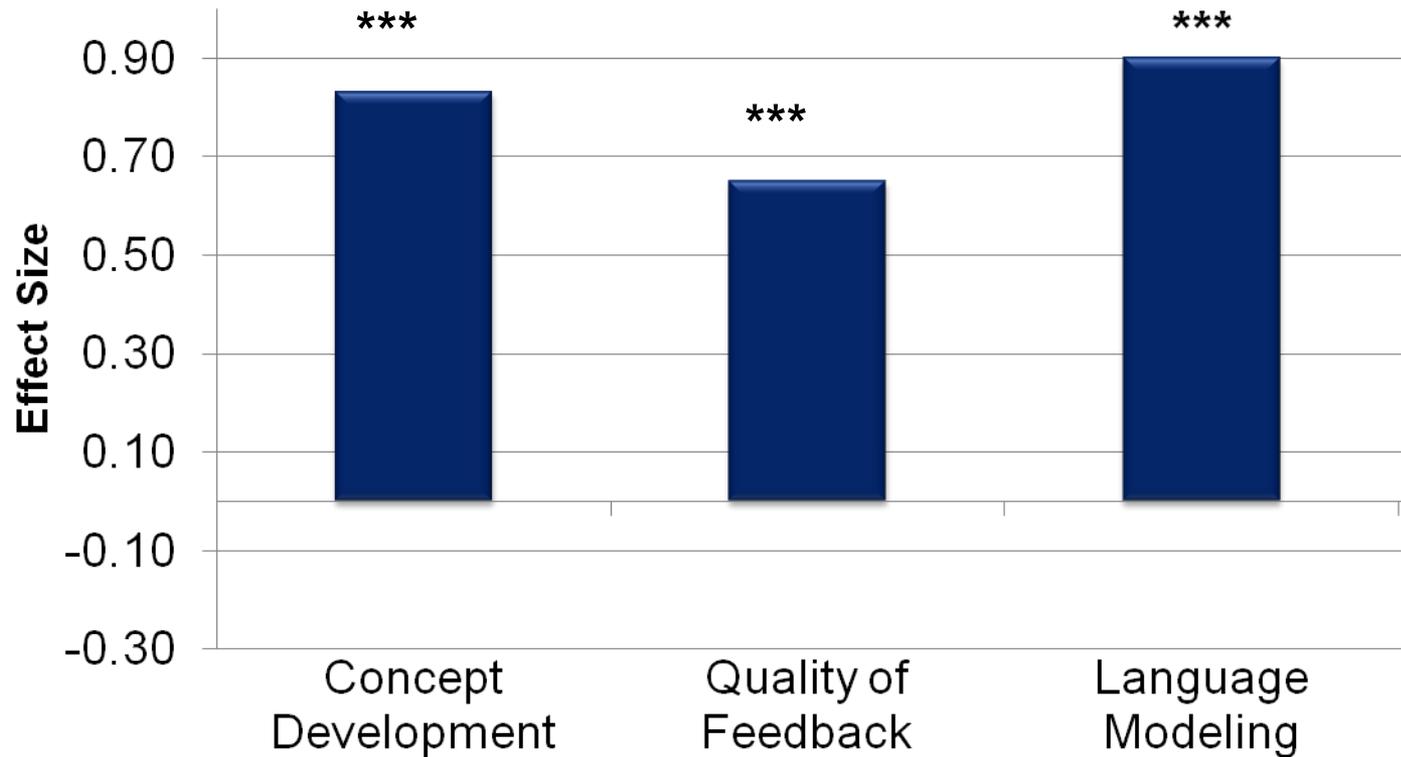
- Greater gains in tests of early literacy
- Lower levels of problem behavior
- Higher levels of expressive language

Course on interactions improves teaching



* $p < .05$; ** $p < .01$; *** $p < .001$

MTP coaching improves instruction



* $p < .05$; ** $p < .01$; *** $p < .001$

Coaching/course effects on readiness

- Children tested in coaching year and in teachers' classrooms the year after coaching
- Literacy, language development, self-regulation
- Effects on language behaviors in coaching year – greater multi-word conversational turns
- In year after coaching, MTP increased self regulation and working memory; language behavior; and literacy in classrooms with targeted curriculum.

Improving impacts: Program design and professional development

- **Direct training in knowledge of child development – literacy, math, social**
- **Skills training in interactions has benefits**
- **Skills training in curricula and delivery**
- **Use of evidence-based educationally-focused, proven-effective curricula. Least prevalent among preschool programs**
- **Program design really matters – design for impact and implementation**

Quality improvement and curriculum

- **Coaching, coursework on interactions produces gains in teaching and in children's engagement, literacy, vocabulary, self-regulation, and math skills**
- **Suite of recent curricula (REDI, Literacy Express, Building Blocks, PATHS) all demonstrate impacts**
- **Issue is redeployment of existing effort and costs toward effective models.**
- **Early Childhood 2.0 – 2 years, full-time, full year, high quality**

Moving the needle – *Access and Quality*

- **Connect observation with PD and feedback to move quality into “active range.” QRIS**
- **Not all coaching, coursework, or observation is effective; must be focused, ongoing**
- **Focused teacher professional development and preparation can increase quality and children’s school readiness – Gap-closing experiences**
- **Teacher preparation and PD – support teachers in their classrooms; focus preparation on actual skills**
- **We can close gaps for kids and support teachers to feel effective and connected**

A path for Virginia

- **Stronger curriculum with training for implementation**
- **Continued emphasis on quality of interactions (VECF initiatives)**
- **Readiness and quality assessments**
 - **Planning, improvement, accountability**
 - **Linkage of preschool→K-12**
- **Data and decision-making infrastructure**

Early Childhood—Impact



Integrated, effective, scalable implementation